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MAIN PATENT

Albert Gemperle, Hombrechtikon.

Display- and sales shelf with a dividing- and feeding device

Albert Gemperle, Hombrechtikon, has been designated as the inventor.

The invention relates to a display- and sales shelf with a dividing- and feeding device.

Shelves of wood, metal, and transparent plastic, which are divided transversely to the length of the shelf by intermediate walls, are already known, whereby prepackaged merchandise, such as cigarettes, for example, are filled into the channels thus formed. It is desirable for a feeding movement to follow after the removal of the forwardmost packet. For this purpose, different systems have already been proposed, such as a sharp inclination of the shelf, among others, so that an automatic subsequent settling takes place, or the application of a roller behind the stack of merchandise which, with a lesser inclination of the shelf, nevertheless causes a forward feeding. A mechanism in which a spiral spring is inserted through under the stack and, behind this, rolls up in such a manner that it brings about the forward feeding, also already exists. Such a spring has the tendency to move up the entire stack, which is still repeatedly the case, particularly upon the removal of the forwardmost packet.

The dividing- and feeding device in accordance with the invention is characterized in that rails which form separated channels are positioned, whereby one elastic pulling element per channel, which proceeds over a forward roller and draws a pushing unit against the forward catch unit, is attached to the rails.

One example of implementation of the object of the invention is depicted in the diagrams. These depict the following:

Figure 1: A view from above onto a shelf with a dividing- and feeding device;

Figure 2: A section through the shelf with a lateral view of the device; and:

Figure 3: A detailed view in accordance with the line III-III in Figure 1.

On its forward edge, the shelf (1) has a longitudinally-proceeding stopping bar (2). The rails (3), so-called "curtain rails" which are positioned transversely to the shelf (1) with recesses T-shaped in cross-section, divide the shelf into individual channels (4) which serve for the accommodation of packaged merchandise, such as cigarette packets (5), for example. The roller (6), around which the elastic pulling element (7), such as a rubber cord, band, or spring, for example, is guided, is located on the forward end of the rail. This pulling element is accommodated in the hollow space of the rail and is attached at point (8) of the rail, on the one hand, while it is connected with the pushing unit (9), on the other hand.

Inside the channel (4), the packets (5) are placed into a stack and, specifically so, between the front stopping bar (2) and the pressed-back pushing unit (9). Through the pulling of the band (7), the packets are at all times pressed by the pushing unit (9) against the stopping bar. After the removal of the forwardmost packet, the feeding takes place automatically.

Near the rear edge of the shelf, a similar rail (11) is attached, but this time proceeding longitudinally, however, which shelf serves, on the one hand, for the attachment and support of the rails (3) and, on the other hand, for the elastic fixing of the holding clamp (12) against the shelf. This extends up to the second forwardmost packet and is intended to prevent the entire stack, or a portion thereof, from springing upwardly upon the removal of the same.

The holding clamp (12) and rails (3) can be attached by means of the screws (13 and 14, respectively) to different points of the rail (11), which permits an adjustment to the packet to be carried out.

PATENT CLAIM

A display- and sales shelf with a dividing- and feeding device, characterized in that, rails which form separated channels are positioned, whereby one elastic pulling element per channel, which proceeds over a forward roller and draws a pushing unit against the forward catch unit, is attached to the rails.

SUB-CLAIMS

1. A shelf with a feeding device in accordance with the patent claim, characterized in that, the rails, considered in the cross-section, have a T-shaped recess in which the pulling element is accommodated and the guide foot of the pushing unit slides.

2. A shelf with a feeding device in accordance with the patent claim and sub-claim 1, characterized in that, the roller over which the pulling element proceeds is positioned near the forward shelf edge, likewise in the T-shaped recess.
3. A shelf with a feeding device in accordance with the patent claim, characterized in that, a rubber pulling device is provided as the pulling device.
4. A shelf with a feeding device in accordance with the patent claim, characterized in that, for each channel, a holding clamp is positioned elastically against the shelf, which [holding clamp] is attached close to the rear edge of the shelf.
5. A shelf with a feeding device in accordance with the patent claim and sub-claim 4, characterized in that, a profile rail in which the holding clamp is attached is positioned near the rear edge of the shelf.

Albert Gemperle

Representative: A. Rossel, Grad. Eng., ETH, Zürich.